



PATENT

03.94  
Box 4

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of:

HALLAHAN ET AL.

CASE NO.: CL1792 US NA

APPLICATION NO.: 10/036,959

GROUP ART UNIT: 1636

FILED: JANUARY 2, 2002

EXAMINER: UNKNOWN

FOR: GENES INVOLVED IN THE BIOSYNTHESIS OF ISOPENTENYL  
DIPHOSPHATE IN HEVEA BRASILIENSIS LATEX

DECLARATION IN ACCORDANCE WITH 37 CFR 1.821

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

I hereby state that the content of the paper and computer readable copies of the Sequence Listing, submitted in accordance with 37 CFR 1.821(c) and (e), respectively are the same.

I hereby state that the computer readable copy of the Sequence Listing, submitted in accordance with 37 CFR 1.821(e) herein does not include new matter.

Respectfully submitted,

S. NEIL FELTHAM  
ATTORNEY FOR APPLICANTS  
REGISTRATION NO. 36,506  
TELEPHONE: 302-992-6460  
FACSIMILE: 302-992-5374

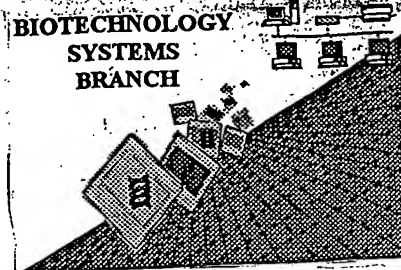
Dated:

5/7/02

I HEREBY CERTIFY THAT THIS PAPER IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO: ASST. COMMISSIONER FOR PATENT, WASHINGTON, D.C. 20231, ON THIS DATE.

5/7/02  
DATE

MARY BETH PITCHER



## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/036,959  
Source: OIPF  
Date Processed by STIC: 1/19/2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.  
PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)  
PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER  
VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND  
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom, including:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission

User Manual - ePAVE)

2. U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:  
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7<sup>th</sup> Floor, Examiner Name,  
Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202

Or

U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two,  
2011 South Clark Place, Arlington, VA 22202

4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office,  
Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202



# Raw Sequence Listing Error Summary

SERIAL NUMBER: 10/036,959

## ERROR DETECTED

## SUGGESTED CORRECTION

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1      Wrapped Nucleics  
    Wrapped Aminos      The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2      Invalid Line Length      The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3      Misaligned Amino  
    Numbering      The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4      Non-ASCII      The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5      Variable Length      Sequence(s)      contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6      PatentIn 2.0  
    "bug"      A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s)     . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7      Skipped Sequences  
    (OLD RULES)      Sequence(s)      missing. If intentional, please insert the following lines for each skipped sequence:  
    (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
    (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
    (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
    This sequence is intentionally skipped  
  
    Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8      Skipped Sequences  
    (NEW RULES)      Sequence(s)      missing. If intentional, please insert the following lines for each skipped sequence.  
    <210> sequence id number  
    <400> sequence id number  
    000
- 9      Use of n's or Xaa's  
    (NEW RULES)      Use of n's and/or Xaa's have been detected in the Sequence Listing.  
    Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
    In <220> to <223> section, please explain location of n or Xaa; and which residue n or Xaa represents.
- 10      Invalid <213>  
    Response      Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11   J   Use of <220>      Sequence(s)   16   missing the <220> "Feature" and associated numeric identifiers and responses.  
    Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
    (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12      PatentIn 2.0  
    "bug"      Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13      Misuse of n      n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

AMC/MH - Biotechnology Systems Branch - 08/21/2001



OIPE

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/036,959

DATE: 01/19/2002  
TIME: 10:55:19

Input Set : A:\CL1792 US NA Seq Listing.txt  
Output Set: N:\CRF3\01192002\J036959.raw

p.6

5 <110> APPLICANT: Hallahan, David  
6 Keiper-Hrynko, Natalie  
10 <120> TITLE OF INVENTION: Genes Involved in the Biosynthesis of Isopentenyl  
diphosphate in  
11 Hevea brasiliensis Latex  
15 <130> FILE REFERENCE: CL1792 US NA  
19 <140> CURRENT APPLICATION NUMBER: US/10/036,959  
19 <141> CURRENT FILING DATE: 2002-01-02  
19 <150> PRIOR APPLICATION NUMBER: 60/307,637  
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Does Not Comply  
Corrected Diskette Needed

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/036,959

DATE: 01/19/2002  
TIME: 10:55:19

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Output Set: N:\CRF3\01192002\J036959.raw

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RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/036,959

DATE: 01/19/2002  
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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/036,959

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TIME: 10:55:20

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377 tgtgctgata gtaaccagtt ccatgctgtc tgcattggata catgtcctcc aattttctac 840
379 atgaacgata catcacacag gataatcagc tgtgttgaaa aatggaatcg ttctgtagga 900
381 acacctcagg tggcttatac ttttgatgct gggcctaagt cagttctaata tgcacataat 960
383 aggaaggccg ctgcccagtt actgcagaag ctgcttttct atttccctcc aaattctgat 1020
385 actgaattaa acagttatgt tcttgggtgat aagtcaatac taaaagatgc tgggattgaa 1080
387 gatttgaagg atgtggaagc attgccacca cctccagaaa ttaaagatgc cccaagatac 1140
389 aaaggggatg ttagttatct catctgtaca agaccaggcc agggtcgggt tttgctctct 1200
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398 <212> TYPE: DNA
400 <213> ORGANISM: Hevea brasiliensis

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/036,959

DATE: 01/19/2002

TIME: 10:55:20

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 Output Set: N:\CRF3\01192002\J036959.raw

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409 accaaactgg gatctatagc cattgaagct gctcttaaaa gggctaattg tgatccatca 180
411 cttgtacaag aagttttctt tggaaatggt ctcagtgcta atttagggca ggctcctgct 240
413 agacaggctg cattaggtgc aggaattcct aattcagtg tctgtaccac tgtaacaaa 300
415 gtttgtgctt cggggatgaa agcaactatg cttgcagccc agagtatcca gttaggcatc 360
417 aatgatgttg ttgttgctgg aggcattggag agcatgtcca atgcacctaa atacctagca 420
419 gaagcaagga agggatctcg acttggacat gattcactag ttgatggaat gctgaaagat 480
421 gggttgtggg atgtttataa tgatgttggc atgggaagtt gtgctgaaat atgtgctgat 540
423 aatcattcaa taacgaggga ggatcaggat aaatttgcta ttcacagttt tgaacgcggt 600
425 attgctgcac aagaaagtgg tgcctttgca tgggaaattg ttccggttga agtttcgaag 660
427 gggcaaggag gaaactatga ctggcatgtg ggttgt 696
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434 <212> TYPE: PRT
436 <213> ORGANISM: Hevea brasiliensis
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443 1 5 10 15
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446 20 25 30
448 Phe Ser Ala Thr Lys Leu Gly Ser Ile Ala Ile Gln Ala Ala Leu Lys
449 35 40 45
451 Arg Ala Asn Val Asp Pro Ser Leu Val Gln Glu Val Phe Phe Gly Asn
452 50 55 60
454 Val Leu Ser Ala Asn Leu Gly Gln Ala Pro Ala Arg Gln Ala Ala Leu
455 65 70 75 80
457 Gly Ala Gly Ile Pro Asn Ser Val Ile Cys Thr Thr Ile Asn Lys Val
458 85 90 95
460 Cys Ala Ser Gly Met Lys Ala Thr Met Leu Ala Ala Leu Thr Ile Gln
461 100 105 110
463 Val Gly Ile Asn Asp Ile Val Val Ala Gly Gly Met Glu Ser Met Ser
464 115 120 125
466 Asn Ala Pro Lys Tyr Leu Ala Glu Ala Arg Arg Gly Ser Arg Leu Gly
467 130 135 140
469 His Asp Thr Ile Ile Asp Gly Met Leu Lys Asp Gly Leu Trp Asp Val
470 145 150 155 160
472 Tyr Asn Asp Phe Gly Met Gly Val Cys Ala Glu Ile Cys Ala Asp Gln
473 165 170 175
475 His Asn Ile Thr Arg Glu Glu Lys Asp Ser Tyr Ala Ile Arg Ser Phe
476 180 185 190
478 Glu Arg Gly Asn Ser Ala Gln Asn Gly Gly Val Phe Ser Trp Glu Ile
479 195 200 205
481 Val Pro Val Glu Val Ser Gly Gly Arg Gly Lys Ser Val Met Val Val
482 210 215 220
484 Asp Lys Asp Glu Gly Leu Ile Lys Phe Asp Ala Ala Lys Leu Arg Lys
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10/036,959 6

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<213> Artificial Sequence

*see item 11 on Euro Summary Sheet*

<400> 16

VERIFICATION SUMMARY  
PATENT APPLICATION: US/10/036,959

DATE: 01/19/2002  
TIME: 10:55:21

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Output Set: N:\CRF3\01192002\J036959.raw

:19 M:270 C: Current Application Number differs, Replaced Current Application No  
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:1113 M:258 W: Mandatory Feature missing, <220> FEATURE:  
:1113 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION: \_



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